AMENDMENTS TO THE CLAIMS

1. (Currently Amended)   An authentication system including a plurality of wireless IC tags and an authentication apparatus which permits a user to use a function provided by the authentication apparatus if authenticity of the user is certified by authentication,

the authentication apparatus comprising:

a tag verification information storage unit operable to store a plurality of pieces of tag verification information for identifying the plurality of wireless IC tags, respectively;

an identification information storage unit operable to store first identification information;

a receiving unit operable to wirelessly receive, from wireless IC tags attached to objects carried by the user, a plurality of pieces of tag certification information for identifying the wireless IC tags attached to the objects, respectively;

a tag judgment unit operable to judge whether or not a level of match between the plurality of pieces of tag verification information and the plurality of pieces of tag certification information satisfies a predetermined condition; and

a user judgment unit operable to, if the tag judgment unit judges that the level of match does not satisfy the predetermined condition, receive second identification information and judge whether or not the first identification information matches the received second identification information; and

a permission unit operable to permit a use of the function if the tag judgment unit judges that the level of match satisfies the predetermined condition, or permit the use of the function if the tag judgment unit judges that the level of match does not satisfy the predetermined condition and the user judgment unit judges that the first identification information matches the received second identification information, and

each of the plurality of wireless IC tags comprising:

a tag certification information storage unit operable to store a piece of tag certification information for identifying a wireless IC tag storing the piece of tag certification information; and

an output unit operable to output wirelessly the piece of tag certification information.

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2. (Currently Amended)   An authentication apparatus which permits a user to use a function provided by the authentication apparatus if authenticity of the user is certified by authentication, the authentication apparatus comprising:

a tag verification information storage unit operable to store a plurality of pieces of tag verification information for identifying a plurality of wireless IC tags, respectively;

an identification information storage unit operable to store first identification information;

a receiving unit operable to wirelessly receive, from wireless IC tags attached to objects carried by the user, a plurality of pieces of tag certification information for identifying the wireless IC tags attached to the objects, respectively;

a tag judgment unit operable to judge whether or not a level of match between the plurality of pieces of tag verification information and the plurality of pieces of tag certification information satisfies a predetermined condition; and

a user judgment unit operable to, if the tag judgment unit judges that the level of match does not satisfy the predetermined condition, receive second identification information and judge whether or not the first identification information matches the received second identification information; and

a permission unit operable to permit a use of the function if the tag judgment unit judges that the level of match satisfies the predetermined condition, or permit the use of the function if the tag judgment unit judges that the level of match does not satisfy the predetermined condition and the user judgment unit judges that the first identification information matches the received second identification information.

3. (Cancelled)

4. (Currently Amended)   The authentication apparatus of Claim 2[[3]], wherein

the first identification information is either (i) first character information being a combination of one or more numerals and/or one or more alphabets and/or one or more signs or (ii) first biological information indicating biological characteristics of the user,

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the second identification information is ~~either (i) second character information being a combination of one or more numerals and/or one or more alphabets and/or one or more signs or (ii)~~ second biological information indicating biological characteristics of the user, and

if the tag judgment unit judges that the level of match does not satisfy the predetermined condition, and the user requests to be permitted to use the function, the user judgment unit receives the second biological information and judges whether or not the first biological information and the received second biological information correspond to a same user.
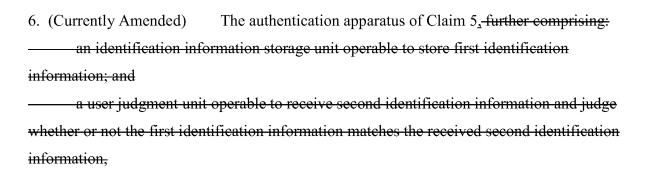
~~if the user judgment unit receives the second character information, the user judgment unit judges whether or not the first character information matches the received second character information, and if the user judgment unit receives the second biological information, the user judgment unit judges whether or not the first biological information and the received second biological information correspond to a same user.~~

5. (Currently Amended)   The authentication apparatus of Claim 2, wherein

the plurality of pieces of tag verification information are a plurality of verification ID codes for identifying the plurality of wireless IC tags, respectively,

the plurality of pieces of tag certification information are a plurality of certification ID codes for identifying the wireless IC tags attached to the objects, respectively, and

the authentication apparatus further comprises:

an update unit operable to, if a predetermined condition for update is satisfied, acquire at least two certification ID codes out of the plurality of certification ID codes received by the receiving unit, and update contents of the tag verification information storage unit by storing the at least two acquired certification ID codes into the tag verification information storage unit as verification ID codes.

6. (Currently Amended)   The authentication apparatus of Claim 5, ~~further comprising: an identification information storage unit operable to store first identification information; and a user judgment unit operable to receive second identification information and judge whether or not the first identification information matches the received second identification information,~~

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wherein the predetermined condition for update is that the first identification information matches the second identification information, and

the update unit updates the contents of the tag verification information storage unit if the first identification information matches the second identification information.

7. (Currently Amended)   The authentication apparatus of Claim 5 further comprising:

a distance calculating unit operable to measure values of a response time during communication between the authentication apparatus and each of the wireless IC tags attached to the objects, and calculate values of a distance between the authentication apparatus and each of the wireless IC tags attached to the objects based on the measured values of the response time~~from which the plurality of certification ID codes have been received~~,

wherein the update unit is further operable to acquire~~acquires~~ at least two certification ID codes for which calculated values of the distance are each equal to or lower than a predetermined value, from the plurality of received certification ID codes.

8. (Currently Amended)   The authentication apparatus of Claim 5, wherein

each of the plurality of certification ID codes contains a type code indicating a type of an object to which a wireless IC tag identified by the certification ID code is attached, and~~wherein~~

the update unit is further operable to acquire~~acquires~~ at least two certification ID codes containing a predetermined type code, from the plurality of certification ID codes received by the receiving unit.

9. (Currently Amended)   The authentication apparatus of Claim 8 further comprising:

a priority level storage unit operable to store a plurality of priority levels with a plurality of type codes corresponding thereto, each of the plurality of priority levels indicating a recording priority with which a corresponding type code is recorded in an authentication recording medium for use in the judgment by the tag judgment unit,

wherein the predetermined type code is correlated with priority levels that are equal to or higher than a priority-level threshold value, and

the update unit is further operable to acquire~~acquires~~ at least two certification ID codes

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that have priority levels that are equal to or higher than the priority-level threshold value, from the plurality of certification ID codes received by the receiving unit, and update~~updates~~ contents of the tag verification information storage unit by storing the at least two acquired certification ID codes into the tag verification information storage unit as verification ID codes by priority.

10. (Original) The authentication apparatus of Claim 9 further comprising:

a priority level update unit operable to receive a type code and a priority level, and update the priority level storage unit by replacing a priority level, which is stored in the priority level storage unit in correspondence with the received type code, with the received priority level.

11. (Currently Amended)   The authentication apparatus of Claim 8 further comprising:

a point storage unit operable to store a plurality of point values with a plurality of type codes corresponding thereto,

wherein the predetermined type codes are correlated with point values that are equal to or higher than a point-value threshold value, and

the update unit is further operable to acquire~~acquires~~ at least two certification ID codes that have point values that are equal to or higher than the point-value threshold value, from the plurality of certification ID codes received by the receiving unit, and update~~updates~~ contents of the tag verification information storage unit by storing the at least two acquired certification ID codes into the tag verification information storage unit as verification ID codes by priority.

12. (Original) The authentication apparatus of Claim 11 further comprising:

a point update unit operable to receive a type code and a point value, and update the point storage unit by replacing a point value, which is stored in the point storage unit in correspondence with the received type code, with the received point value.

13. (Currently Amended)   The authentication apparatus of Claim 2, wherein

the plurality of pieces of tag verification information are a plurality of pieces of unique authentication data for verification assigned by the authentication apparatus,

the plurality of pieces of tag certification information are a plurality of pieces of unique authentication data for certification assigned by the authentication apparatus, and

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the receiving unit wirelessly receives, from the wireless IC tags attached to the objects, a plurality of ID codes for identifying the wireless IC tags attached to the objects, respectively[[;]], and

the authentication apparatus further comprises:

an update unit operable to, if a predetermined condition for update is satisfied, generate a different piece of authentication data for each ID code received by the receiving unit, acquire at least two pieces of authentication data from pieces of generated authentication data, and update contents of the tag verification information storage unit by storing the at least two pieces of acquired authentication data into the tag verification information storage unit as authentication data for verification; and

a transmission unit operable to transmit, for each piece of authentication data for verification having been updated by the update unit, a piece of authentication data for verification as a piece of authentication data for certification, to a wireless IC tag having an ID code corresponding to the piece of authentication data for verification.

14. (Currently Amended)   The authentication apparatus of Claim 13,
~~further comprising:~~

~~an identification information storage unit operable to store first identification information; and~~

~~a user judgment unit operable to receive second identification information and judge whether or not the first identification information matches the received second identification information,~~

wherein the predetermined condition for update is that the first identification information matches the second identification information, and

if the first identification information matches the second identification information, the update unit updates the contents of the tag verification information storage unit, and the transmission unit transmits, for each piece of authentication data for verification having been updated by the update unit, a piece of authentication data for verification as a piece of authentication data for certification, to a wireless IC tag having an ID code corresponding to the piece of authentication data for verification.

15. (Currently Amended) The authentication apparatus of Claim 13 further comprising:

a distance calculating unit operable to <u>measure values of a response time during communication between the authentication apparatus and each of the wireless IC tags attached to the objects, and</u> calculate values of a distance between the authentication apparatus and each of the wireless IC tags <u>attached to the objects based on the measures values of the response time</u><s>from which the plurality of ID codes have been received</s>,

wherein the update unit <u>is further operable to acquire</u><s>acquires</s> at least two pieces of authentication data corresponding to ID codes for which calculated values of the distance are each equal to or lower than a predetermined value, among the plurality of received ID codes.

16. (Currently Amended) The authentication apparatus of Claim 13, wherein

each of the plurality of ID codes contains a type code indicating a type of an object to which a wireless IC tag identified by the ID code is attached, <u>and</u><s>wherein</s>

the update unit <u>is further operable to acquire</u><s>acquires</s> at least two pieces of authentication data corresponding to ID codes that include a predetermined type code among the plurality of ID codes received by the receiving unit.

17. (Currently Amended) The authentication apparatus of Claim 2, wherein

each of the plurality of pieces of tag certification information contains a type code indicating a type of an object to which a wireless IC tag identified by the piece of tag certification information is attached, <u>and</u><s>wherein</s>

the tag judgment unit <u>is further operable to judge</u><s>judges</s> whether or not a level of match between the plurality of pieces of tag verification information and one or more pieces of tag certification information, which remain after excluding, from the plurality of pieces of tag certification information received by the receiving unit, pieces of tag certification information that contain a predetermined type code, satisfies a predetermined condition.

18. (Currently Amended) The authentication apparatus of Claim 2, wherein

the tag verification information storage unit <u>is</u> further <u>operable to store</u><s>stores</s> expiration date/time information that indicates an expiration date/time of each piece of tag verification information, and

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the authentication apparatus further comprises:

a control unit operable to, if having judged that any expiration date/time of the plurality of pieces of tag verification information has not been reached, control the receiving unit to receive the plurality of pieces of tag certification information.

19. (Currently Amended)   The authentication apparatus of Claim 2, wherein

the tag judgment unit is further operable to judgejudges whether or not a ratio of (i) a number of pieces of tag verification information that, among the plurality of pieces of tag verification information, match any of the plurality of pieces of tag certification information to (ii) a total number of the plurality of pieces of tag verification information stored in the tag verification information storage unit, is equal to or higher than a standard value.

20. (Currently Amended)   The authentication apparatus of Claim 2, wherein

the tag verification information storage unit is further operable to storestores point values indicating weights assigned to the plurality of pieces of tag verification information, in correspondence with the plurality of pieces of tag verification information, and

the tag judgment unit is further operable to judgejudges whether or not a ratio of (i) an acquired point value that is obtained by adding up point values corresponding to pieces of tag verification information that, among the plurality of pieces of tag verification information, match any of the plurality of pieces of tag certification information to (ii) a total point value that is obtained by adding up point values corresponding to the plurality of pieces of tag verification information stored in the tag verification information storage unit, is equal to or higher than a standard value.

21. (Original) The authentication apparatus of Claim 2, wherein

the tag verification information storage unit is a portable recording medium, and

the portable recording medium is inserted in the authentication apparatus.

22. (Currently Amended)   An authentication method for an authentication apparatus which permits a user to use a function provided by the authentication apparatus if authenticity of the user is certified by authentication,

the authentication apparatus comprising:

a tag verification information storage unit operable to store a plurality of pieces of tag verification information for identifying a plurality of wireless IC tags respectively~~;~~ ~~, and~~

an identification information storage unit operable to store first identification information, and

the authentication method comprising the steps of:

wirelessly receiving, from wireless IC tags attached to objects carried by the user, a plurality of pieces of tag certification information for identifying the wireless IC tags attached to the objects, respectively;

judging whether or not a level of match between the plurality of pieces of tag verification information and the plurality of pieces of tag certification information satisfies a predetermined condition;~~ and~~

receiving, if the level of match judging step judges that the level of match does not satisfy the predetermined condition, second identification information and judging whether or not the first identification information matches the received second information; and

permitting a use of the function if the level of match judging step judges~~it is judged in the~~ ~~above step~~ that the level of match satisfies the predetermined condition, or permitting the use of the function if the level of match judging step judges that the level of match does not satisfy the predetermined condition and the identification information judging step judges that the first identification information matches the received second identification information.

23. (Cancelled)

24. (Currently Amended) A non-transitory computer-readable recording medium having~~recording therein~~ an authentication program recorded thereon that when executed causes a computer to operate as an authentication apparatus which permits a user to use a function provided by the authentication apparatus if authenticity of the user is certified by authentication,

the authentication apparatus comprising:

a tag verification information storage unit operable to store a plurality of pieces of tag verification information for identifying a plurality of wireless IC tags respectively~~;~~ ~~, and~~

an identification information storage unit operable to store first identification

information, and

the authentication program comprising the steps of:

wirelessly receiving, from wireless IC tags attached to objects carried by the user, a plurality of pieces of tag certification information for identifying the wireless IC tags attached to the objects respectively;

judging whether or not a level of match between the plurality of pieces of tag verification information and the plurality of pieces of tag certification information satisfies a predetermined condition; and

receiving, if the level of match judging step judges that the level of match does not satisfy the predetermined condition, second identification information and judging whether or not the first identification information matches the received second identification information; and

permitting a use of the function if the level of match judging step judges it is judged in the above step that the level of match satisfies the predetermined condition, or permitting the use of the function if the level of match judging step judges that the level of match does not satisfy the predetermined condition and the identification information judging step judges that the first identification information matches the received second identification information.

25. (New)   The authentication apparatus of Claim 2, wherein

the first identification information is first character information being a combination of one or more numerals and/or one or more alphabets and/or one or more signs,

the second identification information is second character information being a combination of one or more numerals and/or one or more alphabets and/or one or more signs, and

if the tag judgment unit judges that the level of match does not satisfy the predetermined condition, and the user requests to be permitted to use the function, the user judgment unit receives the second character information and judges whether or not the first character information matches the received second character information.